

Abstract

The present invention comprises a method and apparatus for automatic discovery of logical links between network devices. In one embodiment, the present invention comprises part of a network management system ("NM") that manages a discrete set of network devices. The NM sends SNMP queries to individual network devices managed by the NM to obtain interface configuration data for each of the network interfaces of the device. The information requested includes destination information ("next hop" or "neighbor" IP address) for data packets sent from the interface. The NM checks to see whether a logical link corresponding to the received configuration information already exists in a logical link database maintained by the NM. If such a link exists the NM checks to see if the existing information for the link is valid. If the existing link data is valid, no change is made. If the existing information is not valid, or if no corresponding link is found in the link database, the NM creates a new link corresponding to the new configuration information. In one or more embodiments, the NM displays a graphical view of the discovered IP links on a graphical network map.